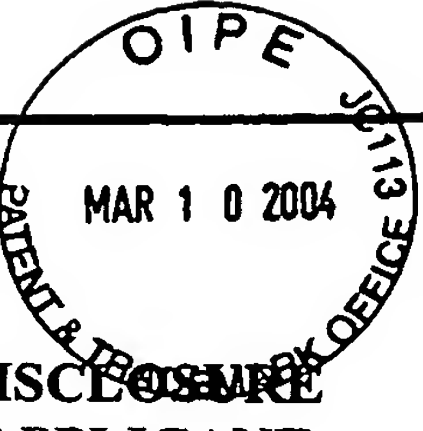


Form PTO-1449

US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)



Complete if Known

Application Number	10/647,794
Filing Date	August 25, 2003
First Named Inventor	Yukihisa TAKEUCHI
Art Unit	Not assigned 2679
Examiner Name	Not assigned E. Kelly
Confirmation No.	2005
Attorney Docket No.	789_115

Sheet

1

of

2

U.S. PATENT DOCUMENTS





Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date
BA		5,874,802	02-23-1999	Choi et al.	—	—	—	—
BB		2002/0153827	10-24-2002	Takeuchi et al.	—	—	—	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract
✓	BC	1-311533 A	12-15-1989	JP				✓
✓	BD	7-147131 A	06-06-1995	JP			JPO Machine Translation	✓
✓	BE	2000-285801 A	10-13-2000	JP			JPO Machine Translation	✓
✓	BF	46-20944	06-12-1971	JP			✓	
✓	BG	44-26125	11-04-1969	JP			✓	
✓	BH	11-185600	07-09-1999	JP			JPO Machine Translation	✓
✓	BI	10-27539 A	01-27-1998	JP			JPO Machine Translation	✓
✓	BJ	11-288249 A	10-19-1999	JP			JPO Machine Translation	✓
✓	BK	63-150837 A	06-23-1988	JP				✓
✓	BL	09-090882 A	04-04-1997	JP			JPO Machine Translation	✓
✓	BM	59-208587	11-26-1984	JP			Partial	
✓	BN	3160213 B2	02-16-2001	JP			JPO Machine Translation	✓
✓	BO	0 953 958 A2	11-03-1999	EP				
✓	BP	2000-310970 A	11-07-2000	JP			JPO Machine Translation	✓
✓	BQ	02/052600 A1	07-04-2002	WO			WO Machine Translation	✓

Form PTO-1449 US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known			
				Application Number		10/647,794	
				Filing Date		August 25, 2003	
				First Named Inventor		Yukihisa TAKEUCHI	
				Art Unit		Not assigned 2877	
				Examiner Name		Not assigned E. Kelley	
				Confirmation No.		2005	
Sheet	2	of	2	Attorney Docket No.		789_115	

OTHER DOCUMENTS
(Including Author, Title, Date, Pertinent Pages etc.)

	BR	Yasuoka, Ishii, "Pulsed Electron Source Using a Ferroelectric Cathode," Tokyo Institute of Technology, Vol. 68, No. 5, 7 January 1999, pp. 546-550.
	BS	Puchkarev, Victor F. and Mesyats, Gennady A., "On the Mechanism of Emission from the Ferroelectric Ceramic Cathode," Journal of Applied Physics, Vol. 78, No. 9, 1 November 1995, pp. 5633-5637.
	BT	Riege, H., "Electron Emission from Ferroelectrics - a Review," Nucl. Instr. and Meth. A340, 1994, pp. 80-89.
	BU	Masatoshi Miyake et al., "Electron Emission from Ferroelectric Cathodes Excited by Pulsed Voltage," Tokyo Institute of Technology, Vol. 119, No. 5, 1999 pp. 622-627.

Examiner:		Date Considered:	8/2/05
-----------	---	------------------	--------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*In accordance with the Notice dated July 11, 2003 on the PTO website, we are not enclosing copies of any of the above U.S. references.

Form PTO-1449

US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)



Complete if Known

Application Number	10/647,794
Filing Date	August 25, 2003
First Named Inventor	Yukihisa TAKEUCHI
Art Unit	Not assigned 2879
Examiner Name	Not assigned E. Kelly
Confirmation No.	2005
Attorney Docket No.	789_115

Sheet 1 of 1

U.S. PATENT DOCUMENTS

Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date
EL	BV	5,280,221	01/18/1994	Okamoto et al.	—	—	—	—
EL	BW	5,747,926	05/05/1998	Nakamoto et al.	—	—	—	—
EL	BX	6,198,225	03/06/2001	Kano et al.	—	—	—	—
EL	BY	6,479,924	11/12/2002	Yoo	—	—	—	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract
EL	BZ	2675306	10/16/1992	FR	—	—	—	✓
EL	CA	2789221	08/04/2000	FR	—	—	—	✓
EL	CB	2789223	08/04/2000	FR	—	—	—	✓
EL	CC	10057072	05/23/2001	DE	—	—	—	✓
EL	CD	0 353 632	02/07/1990	EP	—	—	—	—

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages etc.)

EL	CE	G. Benedek et al., "Electron Emission From Ferroelectric/Antiferroelectric Cathodes Excited by Short High-Voltage Pulses", Journal Applied Physics, Vol. 81, No. 3, 1 February 1997, pages 1396-1403
EL	CF	Gundel, H. et al., "Low Pressure Hollow Cathode Switch Triggered by a Pulsed Electron Beam Emitted From Ferroelectrics", Applied Physics Letter, American Institute of Physics, New York, US Vol. 54, No. 21, 22 May 1989, pages 2071-2073
EL	CG	Gundel, H. et al., "Time-Dependent Electron Emission From Ferroelectrics by External Pulsed Electric Fields", Journal of Applied Physics, American Institute of Physics, New York, US Vol. 69, No. 2, 15 January 1991, pages 975-982

Examiner:

E. Kelly

Date Considered:

8/2/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*In accordance with the Notice dated July 11, 2003 on the PTO website, we are not enclosing copies of any of the above U.S. references.

Form PTO-1449 US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known Application Number: 10/647,794 Filing Date: August 25, 2003 First Named Inventor: Yukihisa TAKEUCHI Art Unit: Not assigned 2879 Examiner Name: Not assigned E. Relling Confirmation No.: 2005	
Sheet	1	of	1	Attorney Docket No.	789 115

U.S. PATENT DOCUMENTS

Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date

U.S. COPENDING APPLICATIONS

Exam. Initial		Application/ Publication Number	Filing/ Publication Date	Inventor Name	Our Docket No.	Class	Sub Class
2	CH	10/808,258	3/24/2004	Takeuchi et al	789 123	—	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages etc.)

Examiner:	<i>Elizabeth Relling</i>	Date Considered:	8/2/05
-----------	--------------------------	------------------	--------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449				<i>Complete if Known</i>	
US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE					
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/647,794
				Filing Date	August 25, 2003
				First Named Inventor	Yukihisa TAKEUCHI
				Art Unit	Not assigned 2879
				Examiner Name	Not assigned J. Kelly
				Confirmation No.	2005
Sheet	1	of	1	Attorney Docket No.	789_115

U.S. PATENT DOCUMENTS

Exam Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract
J	CI	3214256	7/27/2001	JP	—	—	Complete English Translation	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages etc.)

Examiner:	<i>J. Kelly</i>	Date Considered:	8/2/05
-----------	-----------------	------------------	--------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/647,794
				Filing Date	August 25, 2003
				First Named Inventor	Yukihisa TAKEUCHI
				Art Unit	Not assigned 2879
				Examiner Name	Not assigned E. Ruller
				Confirmation No.	2005
Sheet 1 of 1				Attorney Docket No.	789_115

U.S. PATENT DOCUMENTS

Exam. Initial	Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date

FOREIGN PATENT DOCUMENTS

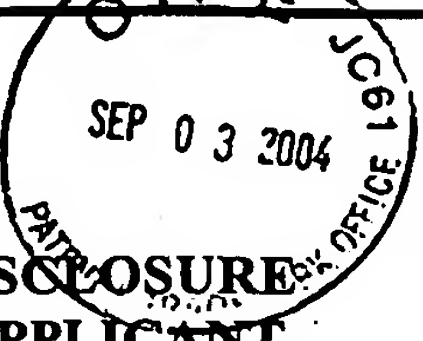
	Document Number	Date	Country	Class	Sub Class	Translation	Abstract
EL CJ	05-325777	12/10/1993	JP	—	—	✓	✓
EL CK	08-111166	04/30/1996	JP	—	—	✓	✓

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages etc.)

Examiner: <i>E. Ruller</i>	Date Considered: 8/2/05
----------------------------	-------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449				<div style="text-align: center;">  </div>	
US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/647,794
				Filing Date	August 25, 2003
				First Named Inventor	Yukihisa TAKEUCHI
				Art Unit	Not assigned <u>2879</u>
				Examiner Name	Not assigned <u>E. Rieley</u>
				Confirmation No.	2005
Sheet	1	of	1	Attorney Docket No.	789_115

U.S. PATENT DOCUMENTS

Exam Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date
<u>Q</u>	CL	6,313,815	11/06/2001	Takeda et al.	—	—	—	—
<u>Q</u>	CM	6,285,123	09/04/2001	Yamada et al.	—	—	—	—
<u>Q</u>	CN	5,666,019	09/09/1997	Potter	—	—	—	—

U.S. RELATED COPENDING APPLICATIONS

Exam Initial		Application/ Publication Number	Filing/ Publication Date	Inventor Name	Our Docket No.	Class	Sub Class
<u>Q</u>	CO	10/919,747	08/17/2001	Takeuchi et al.	789_118 CIP2	—	—
<u>Q</u>	CP	10/901,932	07/29/2004	Takeuchi et al.	789_118 CIP5	—	—
<u>Q</u>	CQ	10/919,678	08/17/2004	Takeuchi et al.	789_133	—	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages etc.)

Examiner:	<u>E. Rieley</u>	Date Considered:	<u>8/2/05</u>
-----------	------------------	------------------	---------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*In accordance with the Notice dated July 11, 2003 on the PTO website, we are not enclosing copies of any of the above U.S. references.

Form PTO-1449

US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

O I P E
SEP 24 2004
PATENT & TRADEMARK OFFICE

Complete if Known	
Application Number	10/647,794
Filing Date	August 25, 2003
First Named Inventor	Yukihisa TAKEUCHI
Art Unit	Not assigned 2879
Examiner Name	Not assigned E. Rielley
Confirmation No.	2005
Attorney Docket No.	789_115

Sheet

1

of

1

U.S. PATENT DOCUMENTS

Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date
ER	CR	2002/0060516 A1	05/23/2002	Kawate et al.	—	—	—	—
ER	CS	6,580,108 B1	06/17/2003	Utsumi et al.	—	—	—	—
ER	CT	6,452,328 B1	09/17/2002	Saito et al.	—	—	—	—
ER	CU	6,469,452 B2	10/22/2002	Seo et al.	—	—	—	—
ER	CV	6,359,383 B1	03/19/2002	Chuang et al.	—	—	—	—
ER	CW	6,274,881 B1	08/14/2001	Akiyama et al.	—	—	—	—
ER	CX	6,184,612 B1	02/06/2001	Negishi et al.	—	—	—	—
ER	CY	6,153,978	11/28/2000	Okamoto	—	—	—	—
ER	CZ	6,040,973	03/21/2000	Okamoto et al.	—	—	—	—
ER	DA	5,990,605	11/23/1999	Yoshikawa et al.	—	—	—	—
ER	DB	5,877,594	03/02/1999	Miyano et al.	—	—	—	—
ER	DC	5,729,094	03/17/1998	Geis et al.	—	—	—	—
ER	DD	5,726,524	03/10/1998	Debe	—	—	—	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract

OTHER DOCUMENTS
(Including Author, Title, Date, Pertinent Pages etc.)

Examiner: <i>E. Rielley</i>	Date Considered: 8/2/05
-----------------------------	-------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449

US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Application Number	10/647,794
Filing Date	August 25, 2003
First Named Inventor	Yukihisa TAKEUCHI
Art Unit	Not assigned 2879
Examiner Name	Not assigned E. Kelley
Confirmation No.	2005
Attorney Docket No.	789_115

Sheet 1 of 1

U.S. PATENT DOCUMENTS								
Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date

FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Sub Class	Translation	Abstract

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages etc.)		
a	DE	Kanemaru, Seigou, "Featuring: All About Flat Displays 2000, Leading Technological Trend of FEDs," Electronic Engineering, Nikkan Kogyo Shimbun, Ltd., July 2000, pp. 38-41 (with partial translation).

Examiner: <i>Elizabeth Kelley</i>	Date Considered: 8/2/05
-----------------------------------	-------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449				<i>Complete if Known</i>	
US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE					
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/647,794
				Filing Date	August 25, 2003
				First Named Inventor	Yukihisa TAKEUCHI
				Art Unit	Not assigned 2879
				Examiner Name	Not assigned E. Kelly
				Confirmation No.	2005
Sheet	1	of	1	Attorney Docket No.	789_115

U.S. PATENT DOCUMENTS

Exam Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date

U.S. RELATED COPENDING APPLICATIONS

Exam Initial		Application/ Publication Number	Filing/ Publication Date	Inventor Name	Our Docket No.	Class	Sub Class
EL	DF	10/951,509	09/28/2004	Takeuchi et al.	789_118 CIP3	—	—
EL	DG	10/950,976	09/27/2004	Takeuchi et al.	789_118 CIP6	—	—
EL	DH	10/952,524	09/28/2004	Takeuchi et al.	789_135	—	—
EL	DI	10/951,832	09/28/2004	Takeuchi et al.	789_136	—	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages etc.)

Examiner:	<i>Elizabeth Kelly</i>	Date Considered:	8/2/05
-----------	------------------------	------------------	--------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*In accordance with the Notice signed September 21, 2004 on the PTO website, we are not enclosing copies of any of the above U.S. references or copending applications filed on or after June 30, 2003.

Form PTO-1449

US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

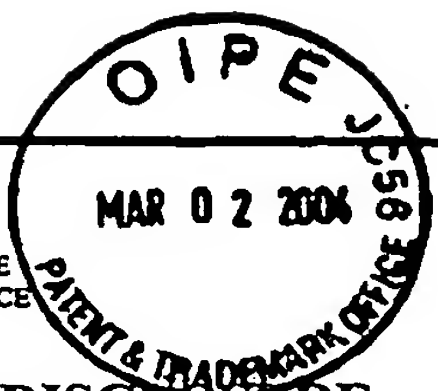
(use as many sheets as necessary)

Sheet

1

of

1



Complete if Known

Application Number

10/647,794

Filing Date

August 25, 2003

First Named Inventor

Yukihisa TAKEUCHI

Art Unit

Not assigned 2879

Examiner Name

Not assigned E. Kelley

Confirmation No.

2005

Attorney Docket No.

789_115

U.S. PATENT DOCUMENTS

Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date
JA	AJ	5,508,590	04/16/1996	Sampayan et al.	—	—	—	—
JA	AK	5,453,661	09/26/1995	Auciello et al.	—	—	—	—
JA	AL	6,157,145	12/5/2000	Vollkommer et al.	—	—	—	—

U.S. COPENDING APPLICATIONS

Exam. Initial		Application/ Publication Number	Filing/ Publication Date	Inventor Name	Our Docket No.	Class	Sub Class
JA	AM	10/719,521	11/21/2003	Takeuchi et al.	789 120	—	—
JA	AN	10/719,596	11/21/2003	Takeuchi et al.	789 121	—	—
JA	AO	10/730,754	12/08/2003	Takeuchi et al.	789 118 CIP	—	—
JA	AP	10/731,901	12/09/2003	Takeuchi et al.	789 122	—	—

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract
JA	AQ	3833604	04/05/1990	DE	—	—	✓	
JA	AR	2639151	05/18/1990	FR	—	—	✓	
JA	AS	428853	05/29/1991	EP	—	—	✓	

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages etc.)

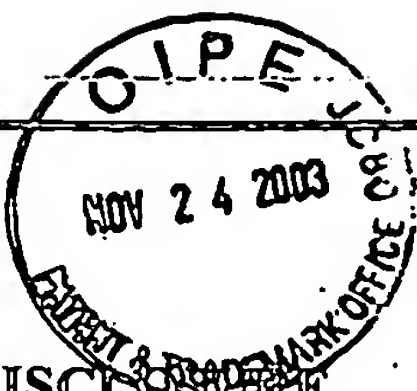
Examiner:	E. Kelley	Date Considered:	8/2/05
-----------	-----------	------------------	--------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449

US DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)



Complete if Known

Application Number	10/647,794
Filing Date	August 25, 2003
First Named Inventor	Yukihisa TAKEUCHI
Art Unit	Not assigned 2879
Examiner Name	Not assigned E. Kelly
Confirmation No.	Unknown
Attorney Docket No.	789 115

Sheet

1

of

1

U.S. PATENT DOCUMENTS

Exam. Initial	Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date

U.S. COPENDING APPLICATIONS

Exam. Initial	Application/ Publication Number	Filing/ Publication Date	Inventor Name	Our Docket No.	Class	Sub Class
EL	AA 10/374,955	02/25/2003	Takeuchi et al.	789 105		
EL	AB 10/459,415	06/11/2003	Takeuchi et al.	789 108 CIP		
EL	AC 10/459,110	06/11/2003	Takeuchi et al.	789 109 CIP		
EL	AD 10/459,416	06/11/2003	Takeuchi et al.	789 110 CIP		
EL	AE 10/459,386	06/11/2003	Takeuchi et al.	789 111		
EL	AF 10/673,384	09/26/2003	Takeuchi et al.	789 116		
EL	AG 10/671,763	09/26/2003	Takeuchi et al.	789 117		
EL	AH 10/678,958	10/03/2003	Takeuchi et al.	789 118		
EL	AI 10/699,186	10/31/2003	Takeuchi et al.	789 119		

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages etc.)

Examiner:

Date Considered:

8/2/05

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.